

JOHN S. WOLD  
EUGENE V. SIMONS

IBLA 79-543

Decided May 30, 1980

Appeal from a decision of the Wyoming State Office, Bureau of Land Management, rejecting sodium preference right lease applications W-9026 and W-9027.

Set aside; hearing ordered.

1. Mineral Lands: Prospecting Permits -- Mineral Leasing Act: Generally -- Regulations: Applicability -- Sodium Leases and Permits: Preference Right Leases

BLM properly applied the regulations set forth in 43 CFR Subparts 3520-21, effective May 7, 1976, to preference right lease applications pending on the effective date of such regulations.

2. Mineral Lands: Prospecting Permits -- Mineral Leasing Act: Generally -- Sodium Leases and Permits: Preference Right Leases

BLM properly excluded from an applicant's demonstrated reserves of trona those reserves which the applicant, by stipulation in the prospecting permit, had agreed would not be subject to mining or recovery operations.

3. Exchanges of Land: Generally -- Mineral Lands: Prospecting Permits -- Mineral Leasing Act: Generally -- Sodium Leases and Permits: Preference Right Leases

An exchange application tendered pursuant to 43 CFR Subpart 3526 is properly rejected by BLM where a preference right lease

applicant has not demonstrated to the Secretary that he has a preference right to a lease.

4. Hearings -- Mineral Lands: Prospecting Permits -- Mineral Leasing Act: Generally -- Sodium Leases and Permits: Preference Right Leases

A hearing is properly ordered pursuant to 43 CFR 3521.1-1(j) where a preference right lease application for trona is rejected and the applicant has alleged in his application facts sufficient to show that he is entitled to a lease. At the hearing, the permittee shall have both the burden of going forward and the burden of proof, and must show by a preponderance of the evidence that he has discovered a valuable deposit of trona and that the land is chiefly valuable therefor.

APPEARANCES: David D. Dominick, Esq., Daane A. Crook, Esq., Denver, Colorado, for appellants.

OPINION BY ADMINISTRATIVE JUDGE HENRIQUES

John S. Wold and Eugene V. Simons appeal from a decision of the Wyoming State Office, Bureau of Land Management (BLM), dated July 9, 1979 rejecting sodium preference right lease applications W-9026 and W-9027. By such applications, appellants sought to lease certain public lands in Sweetwater County, Wyoming, for development of the trona reserves therein. 1/ Trona is a monoclinic combination of normal and acid sodium carbonate and, as such, is subject to the Mineral Lands Leasing Act, 30 U.S.C. § 181 (1976).

Appellants' efforts to secure a preference right lease to each of the above parcels began in October of 1967 when John S. Wold filed an application for a prospecting permit. On December 1, 1968, this permit was issued, and shortly thereafter Wold assigned his interest in this permit to BTU, Inc. During the 2-year term of the permit, BTU, Inc., applied for a preference right lease to each parcel, alleging a discovery of trona therein.

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1/ In W-9026, appellants seek to lease the following lands in T. 15 N., R. 108 W., sixth principal meridian: secs. 12 and 14; lots 1, 2, N 1/2 NE 1/4, NW 1/4, W 1/2 SW 1/4 sec. 22; and sec. 24. In W-9027, appellants seek to lease sec. 6, T. 15 N., R. 107 W., sixth principal meridian; secs. 2 and 10, T. 15 N., R. 108 W., sixth principal meridian; and sec. 30, T. 15 N., R. 107 W., sixth principal meridian.

BLM referred the question of whether a discovery of trona existed on each claim to the Geological Survey (GS). A memorandum, dated April 28, 1971, from Russell Wayland, Chief, Conservation Division, acting for the Director, GS, confirmed the existence of valuable deposits of sodium on the subject lands. Wayland wrote:

Our records and field examinations show that the lands have been prospected in accordance with terms of the permit and the operating regulations.

Valuable deposits of sodium were discovered in the Lost Dog No. 1 trona well on land under W-9027 and in the East Lost Dog trona well on land under W-9026, which entitles the applicant to preference right sodium leases for all of the lands under the permits. Mechanical and lithologic logs of the discovery wells are in our files.

Accordingly, we recommend that a lease be issued for all of the available lands under the captioned permits subject to the following conditions [not here pertinent].

The progress of appellants' lease applications thereafter is summed up in memoranda of May 5, 1972, and May 20, 1975, by Arne Mattila, District Mining Engineer:

As most of the lands under application are in the Flaming Gorge Recreation Area administered by the U.S. Forest Service and the rest on BLM-administered land, an examination and a Section 102 impact statement was deemed necessary by USFS officials. \* \* \* I assured my fellow examiners that we would restrict the amount of mining allowed in the area if leases issued. A mine or refinery on recreation area lands being seen from the various campsites and from the surface of the impounded lake waters is objectionable to USFS personnel. However, a mine and plant on Section 24, Township 15 North, Range 108 West, is hidden from persons engaging in recreational activities, the drainage is away from the lake, and the site is on the lee side of the prevailing westerly winds. This is the only site on recreation area lands on which construction of a mine or plant would be recommended if the leases issue. There are several plant sites on BLM-administered and UP [Union Pacific] lands that would fulfill the criteria set by the foresters \* \* \*. No conclusions were reached on this examination. However, the foresters indicated that further studies by other members of their environmental impact team would be necessary before any report is forthcoming.

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Sodium permits were granted for the lands under W-9026 and [W-90]27 December 1, 1968, the exploration performed and preference right lease applications recommended by the Survey April 28, 1971. \* \* \* The permits were issued before establishment of the Flaming Gorge Recreation Area when the lands were in a Bureau of Reclamation withdrawal. A Forest Service /team produced an environmental analysis report recommending that the applications for preference right leases be denied. This ignored the BLM request for stipulations and our recommendation.

On May 7, 1976, new regulations were issued setting forth in some detail the proof required of a preference right lease applicant to qualify for a lease. Therein, reference was made to 30 U.S.C. § 262 (1976), the statutory authority for the Secretary's issuance of a preference right lease. That section reads:

Upon showing to the satisfaction of the Secretary of the Interior that valuable deposits of [carbonates of sodium] have been discovered by the permittee within the area covered by his permit and that such land is chiefly valuable therefor, the permittee shall be entitled to a lease for any or all of the land embraced in the prospecting permit at a royalty of not less than 2 per centum \* \* \*. [Emphasis supplied.]

A definition of the phrase "valuable deposits" was provided by the new regulations at 43 CFR 3520.1-1(c):

A permittee has discovered \* \* \* a valuable deposit of one of the \* \* \* permit minerals if the mineral deposit discovered under the permit is of such a character and quantity that a prudent person would be justified in the further expenditure of his labor and means with a reasonable prospect of success in developing a valuable mine. The permittee must present sufficient evidence to show that there is a reasonable expectation that his revenues from the sale of the mineral will exceed his costs of developing the mine, and extracting, removing, and marketing the mineral.

Despite the GS recommendation of April 1971 that valuable deposits of sodium had been found on the subject lands, appellants were required by B to make an "initial showing" of the quantity and quality of the minerals in the permit area pursuant to the newly issued 43 CFR 3521.1-1(b). On June 30, 1977, appellants filed their initial showing. Shortly thereafter on November 7, 1977, the Chief, Branch of Lands and Minerals Operations, wrote to the District Mining Supervisor, GS, stating:

[I]n light of new regulations concerning sodium, we would like a reevaluation [of] these applications as to whether the applicant has found a valuable deposit of sodium (trona) and that the land is chiefly valuable for the mineral deposit discovered (43 CFR 3521.1-1(h)(1)(ii) and (iii); 43 CFR 3520.1-1(a)(2)[ ]). This is necessary since the applications are located within the Flaming Gorge National Recreation Area and administered by the USFS. [2/]

In a memorandum dated June 15, 1978, the Area Mining Supervisor reported to the State Director, BLM, that appellants' initial showing was deficient in its calculation of the quantity of sodium in the subject land and in its analysis of the quality of sodium therein. Appellants were notified of these deficiencies and were given 90 days in which to correct them.

In a timely response to BLM's notice, appellants recalculated their sodium reserves in accordance with BLM's instructions and arrived at a figure of 58,188,364 tons in place of sodium demonstrated reserves. In response to BLM's request for an analysis of trona quality, appellants submitted assay reports of samples taken by appellants in 1970.

Thereafter on March 29, 1979, the Acting Conservation Manager, for the State Director, GS, while acknowledging the Wayland memorandum of April 28, 1979, in support of appellants' application, reported to the State Director, BLM, that there existed demonstrated reserves insufficient to form an economic mining unit in view of expected development costs. Appellants' assays were found to contain several instances of mislocated and/or erroneously described sample intervals. The memorandum concluded that applicants had not found minerals of sufficient quantity and quality to qualify the discovery as a valuable deposit of sodium.

Further chemical analyses were submitted by appellants on May 10, 1979, to establish trona quality. GS reviewed the data and found that the samples tendered represented intervals "much too thin to be minable."

Against this background of facts, BLM rejected appellants' preference right lease applications on July 9, 1979. This decision recounted the opinion of GS that the trona deposits were of insufficient size and thickness to be economically recoverable. This opinion

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2/ This memorandum of November 7, 1977, referred to a proposed assignment by BTU, Inc., of its interest in the sodium preference right lease applications at issue to John S. Wold and Eugene V. Simons, appellants herein. This assignment was approved effective February 1, 1978.

of GS was based, in the words of the decision, "on established criteria utilized by Geological Survey in determining measured and indicated reserves and [on] an existing stipulation in the permits which restricts and limits the reserves that may be considered within the permit boundaries." Accordingly, appellants' applications were rejected for failure to demonstrate minerals in sufficient quantity and quality to qualify the discovery as a valuable deposit of sodium.

Appellants filed a timely appeal to this decision and set forth a number of arguments in their statement of reasons:

1. BLM acted arbitrarily in requiring a reevaluation of the 1970 discovery data in accordance with regulations promulgated in 1976, some five years after GS had recommended issuance of preference right leases to appellants.

2. Stipulations in appellants' prospecting permit reduce the trona demonstrated reserve base (TDRB) and jeopardize the "economic viability of mining the permit lands."

3. Appellants' offer to exchange the subject lands for others in less sensitive areas was rejected for lack of authority, since remedied by regulation.

4. BLM and GS applied ultraconservative geologic standards, set forth in GS Bulletin 1450-B, which diminished the size of appellants' TDRB and caused rejection of their application for insufficient quantity.

5. Appellants are required to use data obtained during 1970 to meet standards defined in 1976.

We shall address these issues in order.

[1] The argument that BLM acted arbitrarily in applying regulations promulgated in May 1976, to discovery data collected in 1970 is answered by the regulations themselves. The applicability of the 1976 regulations is set forth at 43 CFR 3520.1-1(d): "The standard in paragraph (c) [defining the term "valuable deposit"] shall apply to all future applications for leases by prospecting permittees, and to applications pending on the effective date of this regulations" (Emphasis supplied). BLM's application of this standard, far from being an arbitrary act, was in fact compelled by the regulations.

The applicability of the 1976 regulations has been affirmed by the Court of Appeals for the District of Columbia in Natural Resources Defense Council v. Berklund, 609 F.2d 553 (1979), a decision involving lease applications filed prior to 1976. Therein at 556-57, the court stated:

[O]utstanding applications are now subject to regulations passed in 1976 that redefine the statutory term, "commercial quantities," and in other ways alter the procedures

for obtaining leases. The new regulations require permittees applying for leases to establish through detailed procedures the profitability of the proposed mining while accounting for the costs of complying with environmental requirements. [Footnote omitted.]

[2] Appellants' second objection is directed to BLM's exclusion of trona reserves from certain areas of the subject lands on the basis of stipulations appearing in the prospecting permit. Those stipulations, acknowledged by appellant Wold at the time of issuance of the prospecting permit, state that "[n]o mining or recovery operations shall be permitted in the area below and 1,000 feet horizontally outside contour elevation 6045 feet and/or within the Blacks Fork Basin recreation development area. Appellant Wold, having accepted this stipulation prior to issuance of the permit, can hardly be heard to complain now when BLM applies this stipulation in calculating trona reserves. BLM's exclusion of trona reserves on those lands where mining or recovery was prohibited by stipulation was a proper step in calculating TDRB and determining the existence of a valuable deposit of trona on the subject lands.

[3] As early as December of 1972, appellant Wold was exploring with BLM the possibility of an exchange of whatever rights appellant had in W-9026 and W-9027 for leasing rights in another area where mining would be less intrusive. BLM's response at that time was to deny appellant's request because of a lack of authority to make such an exchange. Since that time, the Department has issued regulations which permit a "mineral prospecting permittee \* \* \* to relinquish the lease to be acquired under preference right \* \* \* in exchange for a mineral lease of other lands of comparable value for sodium \* \* \*." 43 CFR 3526.0-1 (effective January 3, 1978).

Key to any exchange under these regulations is the ability of the permittee to show that he has a preference right to a lease. The permittee's showing shall include the initial showing required by 43 CFR 3521.1-1(b) and may include the final showing required by 43 CFR 3521.1-1(c)-(e). In all cases, however, the permittee must demonstrate to the Secretary that he has a preference right to a lease. 43 CFR 3526.2(c). The determination that a preference right exists, as a practical matter, is made by the appropriate State Office, BLM. In the absence of a showing that a valuable deposit of trona exists on the subject lands, BLM has correctly rejected appellants' request for exchange. Whether or not BLM has correctly determined that a valuable deposit of trona exists is the focus of appellants' fourth and fifth arguments on appeal.

[4] Appellants' principal argument on appeal charges that GS and BLM applied ultraconservative standards in determining how much trona existed in the permit lands. By application of such standards, set forth in GS Bulletin 1450-B, GS and BLM understated the trona reserves in the permit lands, appellants argue. Understatement of reserves

then allowed GS and BLM to conclude that insufficient reserves existed to constitute a valuable deposit.

The standards set forth in GS Bulletin 1450-B permit a geologist to conclude that measured reserves of a mineral exist within a circular area one-fourth mile from a drill hole. Indicated reserves may be assumed to exist within an area three-fourths mile from a drill hole, excluding the area occupied by measured reserves. Demonstrated reserves, the sum of measured and indicated reserves, therefore, occupy the circular area with three-fourths mile of a drill hole. In assessing whether appellants have sufficient quantity of trona, only measured and indicated reserves are considered. 43 CFR 3521.1-1.

Appellants argue that sufficient knowledge exists of the permit lands to justify application of more liberal standards found in GS Bulletin 1450-A. The Bulletin, entitled, Principles of Mineral Resource Classification System of the U.S. Bureau of Mines and U.S. Geological Survey, is a glossary of resource terms generally applicable to all naturally occurring concentrations of metals, nonmetals, and fossil fuels. Bulletin 1450-B, entitled Coal Resource Classification System of the U.S. Bureau of Mines and U.S. Geological Survey, provides a glossary of coal classification terms and criteria for coal resource/reserve identification.

Appellants allege, and Survey apparently recognizes, that under Bulletin 1450-A standards, a geologist may conclude that measured reserves of a mineral exist within a circular area one-half mile from a drill hole. Indicated reserves may be assumed to exist within an area one and one-half miles from a drill hole, excluding the area occupied by measured reserves. Hence, demonstrated reserves may be projected within a circular area one and one-half miles from a drill hole. If Bulletin 1450-A standards are applied, appellants' trona reserves are four times as great as under Bulletin 1450-B standards.

Appellants argue that the decision to apply the more liberal Bulletin 1450-A standards properly belongs to GS personnel acquainted with the lands under consideration. Appellants present memoranda from the District Geologist, Salt Lake City, in favor of Bulletin 1450-A standards for use in the instant case:

These adapted spacings [using Bulletin 1450-A standards] efficiently determine TDRB's that are both realistic and conformable to the known geologic habit of the trona beds in the subject area. TDRB's generated from the spacing-intervals dictated for coal DRB's by Bulletin 1450-B not only would be ultraconservative but worsely [sic], would promulgate drilling more holes than are needed: a waste of time, dollars, and energy. [3/]

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3/ Memorandum to the Area Mining Supervisor, Salt Lake City, through the District Geologist, Salt Lake City, from Geologic Field Assistant, Thomas R. Abbay, May 10, 1978.





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Implicit in the geological profession is the understanding that a geologist will use his specialized knowledge of the habit of bedded deposits to determine the optimum efficiency of spacing of data points used in determining a DRB in a specific area. The geologist thus determines when enough drilling has been done or conversely, when more drilling would be a waste. Authorization for this is spelled out and given to district geologists by the Chief of the Conservation Division in memoranda of December 1, 1969 and June 18, 1973, to the Mining Supervisors and Area Geologists, viz Subjects: 1.--"Lateral continuity of a leasable mineral \* \* \*", and 2.--"Resource-Reserve calculations--bedded leasable mineral deposits." In these memoranda is the caveat that geologic data and judgment must not be unrealistically restricted by inflexible guidelines.

Albeit all of the preceding is true, within the Conservation Division the prevailing belief appears to be that we are mandated to use the "guidelines" (sic) set forth specifically for coal in Bulletin 1450-B in making determinations for trona. [4/]

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We feel that your problems in the matter under discussion stem from the same source as do ours--the attempts of some to establish Bulletin 1450-B as an inflexible mandate in evaluating reserves for all bedded deposits. It is unbelievable that we are faced with this situation in view of the fact that this clearly was not the intended purpose of 1450-B (see Forward in 1450-B). As a rigid dictate to procedure, the deficiencies of 1450-B render it unfit for any but the most simplistic and generalized cases. Such a case might involve a large area of land under investigation by persons not primarily interested or competent in reserve estimations, viz, a sedimentationist producing geologic maps which happen to contain deposits of coal.

There are several memoranda on file from the Division Chief which do not restrict the District Geologist solely to the use of Bulletin 1450-B guidelines in non-coal resource reserve evaluations. In view of the flexibility

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4/ Memorandum to the Area Mining Supervisor, Salt Lake City, from the District Geologist, Salt Lake City, May 10, 1978.

allowed by these memoranda, we developed a set of parameters for evaluating the TDRB for a site-specific application (W-9026 and W-9027). While the parameters generated for this PRLA and set forth in our memorandum are statistically proven to be realistic for the area under analysis, they are not intended as standards for evaluating PRLAs on a regional basis. We accept that indiscriminate extension of these parameters into other areas of the trona basin would be premature and unwarranted. However, until a general set of trona guidelines is established (as 1450-B was for coal), each PRLA must be evaluated on a site-specific basis. This is the only rational approach in view of the problems inherent in applying coal parameters to non-coal resources.

Hopefully, portions of the included report will demonstrate some of the problems imposed by blind application of 1450-B and will lend insight into how we work within the spirit of, if not the letter of, 1450-B.

Remember, no matter how closely spaced holes are drilled, there will always remain a chance that there will be "wants" or what have you, undetected. That is the reality of nature and that is why we have small sample theory. No matter what we may wish or believe, nature can only be measured in terms of probability which, in turn, is best handled statistically. That is where 1450-B is totally silent and wherein lies its greatest deficiency. [5/]

As calculated using Bulletin 1450-B guidelines, appellants' TDRB is estimated by GS at 2,670,000 short tons, an amount regarded by BLM as insufficient to constitute a valuable deposit. Using Bulletin 1450-A guidelines, appellants' TDRB is estimated by GS at 31,400,000 tons, an amount which appellants regard as sufficient to demonstrate a valuable deposit.

No reason appears in the file to justify the use by GS of the more restrictive Bulletin 1450-B guidelines. Appellants' contention that Bulletin 1450-A guidelines are appropriate is based upon the existence of sufficient knowledge of the trona beds themselves. While the various memoranda would suggest that such knowledge exists, 6/ we

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5/ Memorandum to the Assistant Area Geologist, NRMA, Casper, Wyoming, from Donald C. Alvord and Thomas R. Abbay, Salt Lake City, Utah, ME-CRMA, June 12, 1978.

6/ The memorandum to the Area Mining Supervisor, Salt Lake City, through the District Geologist, Salt Lake City, from the Geologic Field Assistant, Salt Lake City, May 10, 1978, contains considerable information of local trona deposits. Appellants allege that this memorandum is now prefaced with the caveat "THIS DOCUMENT MAY NOT REFLECT THE VIEWS OF THE US GEOLOGICAL SURVEY."



feel it appropriate to abstain from making findings at this time to allow for a resolution of this issue, inter alia. Given the conflict of views within GS, we hereby order a hearing to be held pursuant to 43 CFR 3521.1-1(j) to determine whether sufficient facts exist to justify application of the guidelines in Bulletin 1450-A. At such hearing, the appellants shall have both the burden of going forward and the burden of proof, and must show by a preponderance of the evidence that they have discovered a valuable deposit of trona and that the subject lands are chiefly valuable therefor. Such hearing should also explore in what way the 1976 regulation, 43 CFR 3520, caused GS to contradict its finding of April 28, 1971, that appellants had shown valuable deposits of sodium. 7/

At such hearing, appellants' evidence of drill hole data shall be limited, as per 43 CFR 3520.1-1, to those drill holes in existence during the term of the prospecting permit. Such drill holes need not have been drilled by appellants and need not be located on the permit lands. If the standards allowing a geologist to project reserves have any validity, such validity should not be affected by who drilled a particular hole or by the fact that a drill hole may be outside the permit area and yet within the appropriate projection radius. Moreover, Survey is instructed to make available for examination such of its employees as the Administrative Law Judge shall deem appropriate.

The parties should be aware that the Court of Appeals for the District of Columbia in Natural Resources Defense Council, supra, recently held that the Secretary has no discretion to reject a preference right lease application on environmental grounds if an applicant has otherwise fulfilled the requirements for a lease.

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7/ In Wolf Joint Venture, 75 I.D. 137 (1968), decided prior to the grant of appellants' prospecting permits, the Solicitor ordered a hearing be held to determine, inter alia, if applicants for a sodium preference right lease had found a valuable deposit of sodium (dawsonite). At p. 139, the Solicitor posed the following questions for consideration at the hearing:

"(a) What is the nature and extent of the sodium deposits that were found within the limits of each permit?

"(b) Is their extraction economically feasible, considering such relevant factors as quality, quantity, and mining production, and marketing costs, and markets?"

These issues posed by the Solicitor bear a striking resemblance to the issues posed by the "valuable deposit" standard set forth in the 1976 regulations at 43 CFR 3520.1-1(c).

The Wayland memorandum of April 28, 1971, quoted in part above, mentions the existence of mechanical and lithologic logs of the discovery wells in GS files. Inasmuch as the quality of trona remains in dispute, such logs should be consulted on this issue as well as on the issue of quantity.

Accordingly, pursuant to the authority delegated to the Board of Land Appeals by the Secretary of the Interior, 43 CFR 4.1, the decision appealed from is set aside and referred to the Hearings Division for action consistent herewith.

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Douglas E. Henriques  
Administrative Judge

We concur:

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James L. Burski  
Administrative Judge

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Edward W. Stuebing  
Administrative Judge

